7. (Amended) A method as claimed in claim 5 wherein the user performs the step of defining one or more boundary points on the image(s).

8. (Amended) A method as claimed in claim 5 further comprising the step of calculating the volume of the subject organ or part from the estimate model.

9. (Amended) A method as claimed in claim 5 further comprising the step of calculating the mass of the subject organ or part from the estimate model.

10. (Amended) A method as claimed in claim 5 wherein the subject organ comprises a ventricle of the heart and the characteristics measured include ventricular mass, endocardial volume and/or wall thickness of all of the ventricle or part thereof.

11. (Amended) A method as claimed in claim 5 wherein the subject organ comprises a ventricle of the heart and the characteristics measured include ventricular abnormalities identified through changes in wall thickness over time.

12. (Amended) A method as claimed in claim 1 wherein the subject organ comprises a kidney and the characteristics measured include cortical

thickness.

17. (Amended) A system as claimed in claim 13 further comprising display means arranged to display one or more images to a user and to superimpose on the image a representation of the intersection of the reference model with the image slice.

19. (Amended) A system as claimed in claim 17 wherein the boundary guide point definition means is arranged to obtain preferred guide point positions from a user.

20. (Amended) A system as claimed in claim 17 further comprising volume calculation means arranged to calculate the volume of the subject organ or part from the estimate model.

21. (Amended) A system as claimed in claim 17 further comprising mass calculation means arranged to calculate the mass of the subject organ or part from the estimate model.

22. (Amended) A system as claimed in claim 17 wherein the subject organ comprises a ventricle of the heart and the characteristics measured include ventricular mass, endocardial volume and/or wall thickness of all of the ventricle

or part thereof.

23. (Amended) A system as claimed in claim 17 wherein the subject organ comprises a ventricle of the heart and the characteristics measured include ventricular abnormalities identified through changes in wall thickness over time.

24. (Amended) A system as claimed in claim 17 wherein the subject organ comprises a kidney and the characteristics measured include cortical thickness.

29. A program as claimed in claim 25 further comprising display means arranged to display one or more images to a user and to superimpose on the image a representation of the intersection of the reference model with the image.

31. (Amended) A program as claimed in claim 29 wherein the boundary guide point definition means is arranged to obtain preferred guide point positions from a user.

32. (Amended) A program as claimed in claim 29 further comprising volume calculation means arranged to calculate the volume of the subject organ or part from the estimate model.

33. A program as claimed in claim 29 further comprising mass calculation means arranged to calculate the mass of the subject organ or part from the estimate model.

34. (Amended) A program as claimed in claim 29 wherein the subject organ comprises a ventricle of the heart and the characteristics measured include ventricular mass, endocardial volume and! or wall thickness of all of the ventricle or part thereof.

35. (Amended) A program as claimed in claim 29 wherein the subject organ comprises a ventricle of the heart and the characteristics measured include ventricular abnormalities identified through changes in wall thickness over time.

36. (Amended) A program as claimed in claim 29 wherein the subject organ comprises a kidney and the characteristics measured include cortical thickness.

37. (Amended) A computer program as claimed in claim 25 embodied on a computer readable medium.